Introduction

When looking at issues of Indian health, it is important to understand the unique historical relationship that exists between tribes and the federal government. The federal government has a moral and legal obligation to provide health services to American Indians and Alaska Natives. This obligation is based upon a unique government-to-government relationship that exists between federally recognized tribes and the U.S. government. It is based upon Article I, Section 8 of the U.S. Constitution and has been affirmed through numerous treaties, federal laws, Supreme Court decisions and Presidential Executive Orders.

This federal obligation became the primary responsibility of the Department of Health and Human Services under the Transfer Act of 1954, which established the IHS under the Public Health Service. Since then, dramatic improvements to the health status of American Indians and Alaska Natives have been realized. For example, according to the latest IHS Trends Report, infant mortality has improved from 22.2 deaths per 1,000 live births in 1974 to 10.9 deaths per 1,000 live births in 1994 (adjusted for racial miscoding).

The U.S. Census estimates there are 2.3 million American Indians and Alaska Natives in the United States. The IHS estimates its eligible service population at 1.46 million. This population is increasing at a rate of 2.0% per year. The population is younger than the U.S. population, with 33% under the age of 15 years as compared to 22% under the age of 15 among U.S. All Races. Socioeconomic indicators reveal that Indians residing on reservations have a median household income of $19,897 as compared to $30,056 for U.S. All Races. The U.S. Census also reported that 31% of Indians live below the federal poverty levels, as compared to only 13.1% of the U.S. population.

While the health status of American Indian and Alaska Native people has improved since "The Transfer Act of 1954", American Indians and Alaska Natives suffer disproportionate mortality and morbidity from a number of diseases as compared to the US population as a whole. From 1992 – 1994, American Indian and Alaska Native age-adjusted death rates for tuberculosis, chronic liver disease/cirrhosis, diabetes mellitus, and accidents were more than triple those of the U.S. All Races (IHS Trends, 1997). According to Native Outreach: A Report to American Indian, Alaska Native and Native Hawaiian Communities by the National Cancer Institute, cancer mortality rates are higher in American Indian and Alaska Native (AI/AN) communities than in the rest of the United States population. Close to half of all Alaska Native homes in Alaska and Navajo homes, on the Navajo reservation, lack potable water or sanitary waste systems.

In response to these public health challenges, a complex system of health services has been developed through the IHS. The IHS provides services directly through a network of hospitals, clinics and contracted services, as well as through agreements with tribes and urban Indian programs. This IHS, tribal and urban (I/T/U) system has achieved significant inroads in addressing Indian health status. The Indian Health Service (IHS) vaccination project, for example, has a nearly 90% rate of vaccination, far better than most non-Indian communities. Over 98% of the IHS and tribal health care systems have earned accreditation from the Joint Commission for the Accreditation of Health Care Organizations, outpacing similar rural health systems in the United States. The Indian Health Service has developed a culturally based approach to health services. Community Health Representatives (CHR) and Community

Health Aides (CHA) are employed as indigenous extensions of the health care system in tribal communities. More and more tribes are taking over the administration and management of health systems from the IHS, under the authority of the Indian Self-Determination Act of 1974.

Yet, with a persistent urgency to improve American Indian and Alaska Native health status, measures must be taken to increase our qualitative and quantitative understanding of Indian health needs. This Roundtable Conference attempted to identify major barriers to needed health related research and research training in American Indian and Alaska Native communities. Convened in August 23 and 24, 1999, this Roundtable Conference was jointly sponsored by the Indian Health Service and the National Institutes of Health.

On-going research within Indian communities is integral to understanding and addressing changing health care needs. However, several barriers have been identified that inhibit the inclusion of American Indian and Alaska Native communities in potentially beneficial biomedical research. Part of the problem can be attributed to the gap in trust and credibility that separates American Indian and Alaska Native communities from the NIH-funded research community. Too few NIH-funded researchers have the trust of reservation communities.

Although a number of NIH Institutes and Centers fund projects that include American Indians and Alaska Natives as research subjects, there has been insufficient outreach to develop or include American Indians and Alaska Natives as researchers. American Indians and Alaska Natives, in fact, remain severely underrepresented among biomedical researchers even though the number of direct healthcare providers of American Indian and Alaska Native descent has increased in recent years. Those Indian scientists who have entered the research field have faced difficulty in attaining the academic research credentials needed to participate in NIH-funded research as principal investigators. From 1995 –1999, for example, less than 0.2% (196) of the 89,518 research applications reviewed by the Center for Scientific Review, NIH, were from self-identified American Indians or Alaska Natives. Even among those self-identified as Indian, a portion of these Principal Investigators are individuals known not to be of Indian descent. The percentage funded may be even lower.

Research and research training needs of American Indian and Alaska Native communities will require measures that are twofold. On the one hand, the National Institutes of Health and the individual Institutes and programs, as well as, NIH-funded researchers must be concerned with improving their credibility with American Indians and Alaska Natives. Concurrently, there must be a concerted effort to increase and support the number of American Indian and Alaska Native biomedical researchers.

Investigator initiated research and training grants are the core activity at NIH. Funding is the result of the peer-reviewed application process. While this approach has been the strength of NIH, it may not meet the needs of certain communities, such as American Indians and Alaska Natives, not traditionally represented on these panels.

Within these limits, the NIH has engaged in a number of activities that encourage American Indian and Alaska Native research participation. For example, in the past seven years the NIH has provided funds to supplement research projects with the specific intent of supporting research training of underrepresented minorities. For the National Institute of General Medical Sciences (NIGMS), 49 out of 1,043 supplement awards have been provided for self-identified American Indians and Alaska Natives. Across all of the Insti-

tutes and Centers of NIH, 8 undergraduate, 14 pre-doctoral, 7 postdoctoral and 3 faculty members who are self-identified American Indians and Alaska Natives were supported in 1998. Additionally, there are a range of research and training grant opportunities for minority-serving institutions. The disadvantage of these programs is that they are, in general, based at major research institutions, far from rural American Indian and Alaska Native communities. Additionally, the NIGMS provided $5.4 million in grant support to institutions serving American Indian and Alaska Native populations in Fiscal Year 1998.

The Minority Opportunities in Research (MORE) Division of the NIGMS convened this Roundtable meeting to learn what American Indians/Alaska Natives see as needs and concerns with regard to biomedical research and research training. MORE seeks to understand what key Indian representatives see as barriers to increasing the professional engagement of American Indians and Alaska Natives in biomedical research. By initiating this dialogue, MORE is searching for ways to improve the record of including American Indians and Alaska Natives as participants in and beneficiaries of the research and training supported by the NIH.